What is claimed is:

1. A semiconductor build-up package comprising:

a die having an active surface , a passive surface, sides between the active surface and the passive surface, and a plurality of bonding pads on the active surface of the die;

a metal carrier having a surface with a cavity for accommodating the die; and

a plurality of dielectric layers formed on the active surface of the die and the surface of the metal carrier, wherein each dielectric layer has a plurality conductive columns for inner electrical connection of the boding pads of the die, at least a layer of conductive traces is formed between the dielectric layers.

2. The semiconductor build-up package in accordance with claim 1, wherein the surface of the metal carrier is coplanar to the active surface of the die.

3. The semiconductor build-up package in accordance with claim 1, wherein at least one conductive column of one of dielectric layers is vertically bonded on the conductive column of the adjacent dielectric layer.

4. The semiconductor build-up package in accordance with claim 1, further comprising a plurality of solder balls, bumps or pins on the outermost dielectric layer.

5. The semiconductor build-up package in accordance with claim 4, wherein the plurality of solder balls are in grid array fashion.

6. The semiconductor build-up package in accordance with claim 1, wherein the metal carrier is made of copper, aluminum or their alloys.

7. The semiconductor build-up package in accordance with claim 1, wherein the conductive columns is made of copper, aluminum or their alloys.

8. The semiconductor build-up package in accordance with claim 1, wherein the dielectric layers are polyimide, epoxy, BT resin, FR-4 resin, FR-5 resin, BCB, or PTFE.

9. The semiconductor build-up package in accordance with claim 1, wherein the metal carrier covers the passive surface and the sides of the die.

10. A semiconductor build-up package comprising:

a die having an active surface , a passive surface and a plurality of bonding pads on the active surface of the die;

a metal carrier having a surface with a cavity for accommodating the die; and

a first dielectric layer on the active surface of the die and the surface of the metal carrier, wherein the first dielectric layer has a plurality of conductive columns bonded on the bonding pads of the die.

11. The semiconductor build-up package in accordance with claim 10, wherein the surface of the metal carrier is coplanar to the active surface of the die.

12. The semiconductor build-up package in accordance with claim 10, further comprising at least a dielectric layer with conductive columns formed on the first dielectric layer.

13. The semiconductor build-up package in accordance with claim 12, further comprising solder balls, bumps or pins are formed on the outermost dielectric layer.

14. The semiconductor build-up package in accordance with claim 10, wherein the metal carrier is made of copper, aluminum or their alloys.

15. The semiconductor build-up package in accordance with claim 10, wherein the conductive columns are made of copper, aluminum or their alloys.

16. The semiconductor build-up package in accordance with claim 10, wherein the plurality of dielectric layers are polyimide, epoxy, BT resin, FR-4 resin, FR-5 resin, BCB, or PTFE.

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